

# **Notice of Allowability**

**Application No.**

09/469,409

**Examiner**

Melvin H. Pollack

**Applicant(s)**

PETERSEN ET AL.

**Art Unit**

2145

## **-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment filed 2/14/05.
2. ☒ The allowed claim(s) is/are 3,5-12,14,17,19,22,24,27 and 29.
3. ☒ The drawings filed on 22 December 1999 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).**
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## **Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date 6/8/05
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☒ Other see attached office action.

MHP

**DETAILED ACTION**

**EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Sam Campbell on 07 June 2005.

The application has been amended as follows:

Claim 1: (Cancelled)

Claim 2: (Cancelled)

Claim 3: (Amended) The method of Claim ~~1~~5, further comprising buffering said packet before said parsing.

Claim 4: (Cancelled)

Claim 5: (Previously presented)

Claim 6: (Amended) An apparatus for packet processing, comprising:

Art Unit: 2145

~~One or more peripheral processors to perform one or more packet processing tasks,  
wherein said one or more peripheral processors comprises, a packet parser to determine a vector;~~

A first peripheral processor for parsing a packet, said packet having a header portion, to  
determine a vector;

A second peripheral processor for deconstructing said packet header to form header data;

A third peripheral processor for searching one or more data structures based on said  
header data to produce search results;

A fourth peripheral processor for editing said packet based on said search results, said  
header data, and said vector;

A central processor to coordinate said ~~one or more~~ packet processing tasks using said  
vector; and

A shared register set coupled to said ~~one or more~~ peripheral processors and to said central  
processor; wherein

Said deconstructing comprises forming a search argument;

Said coordinating comprises,

Storing data within said shared register set,

Said central processor and said one or more peripheral processors share data using  
shared register set,

Said central processor monitors said deconstructing, said searching, and said  
editing processes, and

Operating on said search argument to form a modified search argument prior to  
said searching; and

Said searching uses said modified search argument.

Claims 7-12: (Original)

Claim 13: (Cancelled)

Claim 14: (Original)

Claim 15: (Cancelled)

Claim 16: (Cancelled)

Claim 17: (Amended) The computer system of Claim ~~15~~ 19, further comprising buffering said packet before said parsing.

Claim 18: (Cancelled)

Claim 19: (Previously presented)

Claim 20: (Cancelled)

Claim 21: (Cancelled)

Art Unit: 2145

Claim 22: (Amended) The computer system of Claim ~~20~~ 24, further comprising buffering said packet before said parsing.

Claim 23: (Cancelled)

Claim 24: (Previously presented)

Claim 25: (Cancelled)

Claim 26: (Cancelled)

Claim 27: (Amended) The computer system of Claim ~~25~~ 29, further comprising buffering said packet before said parsing.

Claim 28: (Cancelled)

Claim 29: (Previously presented)

***Allowable Subject Matter***

2. Claims 3, 5-12, 14, 17, 19, 22, 24, 27, and 29 are allowed.

Art Unit: 2145

3. The following is an examiner's statement of reasons for allowance: for reasons mentioned in the previous office action and in the applicant's remarks section.

4. The following is an examiner's statement of reasons for allowance: the examiner has determined that the related art do not teach or suggest the modification of this particular type of search argument for the expressed purpose and within the express embodiment thereof. Nor is there taught any motivation to combine with another system to produce this modification of the search argument. Therefore, the examiner has determined that claim 5 is allowable.

5. Claims 6, 19, 24, and 29 teach similar limitations as claim 5 and are therefore allowable for the reasons above.

6. Claims 3, 7-12, 14, 17, 22, and 27 are dependent on one of the allowable claims and are therefore allowable for the reasons above.

### ***Conclusion***

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. They teach background regarding the state of the art at the time of the invention.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melvin H. Pollack whose telephone number is (571) 272-3887. The examiner can normally be reached on 8:00-4:30 M-F.

Art Unit: 2145

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Valencia Martin-Wallace can be reached on (571) 272-6159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MHP

08 June 2005

  
VALENCIA MARTIN-WALLACE  
SUPERVISORY PATENT EXAMINER